

# **NUCLEAR SECURITY SUMMIT 2014**

# NATIONAL PROGRESS REPORT

# **CHINA**

## MARCH 2012 - PRESENT

The Chinese government has taken active measures to implement the outcomes of the Seoul Nuclear Security Summit and made significant progress in areas such as improving the national nuclear security system, managing nuclear and radioactive materials, training nuclear security personnel, combating illicit trafficking of nuclear materials, strengthening international architecture on nuclear security, supporting the work of the International Atomic Energy Agency (IAEA) and enhancing international exchanges.

#### 1. IMPROVING THE NATIONAL NUCLEAR SECURITY SYSTEM

It is the fundamental responsibility of each state to maintain security of its nuclear materials and facilities. China is dedicated to improving its nuclear security system and enhancing nuclear security capabilities.

- (1) Steadily developing domestic legislation. China has been continuously improving and updating its relevant domestic legislations, regulations, guidelines and industry standards. China is actively promoting legislation on atomic energy and is in the process of drafting National Nuclear Security Regulations, both of which will be included in the legislative agenda of the National People's Congress of China.
- (2) Continuously enhancing nuclear security capabilities. China has been continuously increasing its input in nuclear security, pushing forward the construction of the National Base for Research and Development of Nuclear and Radiological Safety and Security Monitoring technologies, enhancing the government's monitoring and managing capabilities, and improving related infrastructure. China has also been actively setting up training courses for nuclear security personnel, and building nuclear security culture.
- (3) Making comprehensive plan for promoting nuclear security. The Chinese government has issued the Plan on Promoting Nuclear Safety and Radioactive Pollution Prevention and Control during the 12th Five-Year Period and Long-term Goals 2020, which has mapped out a comprehensive plan for future nuclear security efforts. China has also issued the National Work Plan on Nuclear Emergency Response during the 12th Five-Year Period, and amended its Nuclear Emergency Plan to maintain effective emergency response capabilities.
- (4) Exercising strict nuclear security regulation. China has endeavored to ensure the safety and security of nuclear facilities, both in operation and under construction. Drawing the lessons of the Fukushima Nuclear Accident, China has been making continuous efforts to improve its nuclear facilities, and upgrade their safety and security level.

## 2. Enhancing the security of highly enriched uranium (HEU)

China pays great attention to the safety and security of HEU and supports minimizing the use of HEU where technically and economically feasible. China has decommissioned two HEU research reactors in a step-by-step manner, and is now actively advancing the conversion of another HEU reactor to using low enriched uranium. The experimental stage of the project is completed, and actual conversion will begin very soon.

China is willing to share its experience and expertise in the conversion of HEU research reactors, and is now helping Ghana to convert its HEU research reactor under the framework of the IAEA. The conversion plan is currently under consultation between the relevant parties.



#### 3. STRENGTHENING MANAGEMENT OF RADIOACTIVE SOURCES

Recognizing the fact that radioactive sources are widely used, China attaches importance to their management, and works hard to enhance the national security level in this field.

- (1) Thorough inventory of radioactive sources. China has conducted a national comprehensive examination on the safety and security of radioactive sources in the areas of nuclear technology application, uranium mining and metallurgy and radioactive articles transportation. China has completed the construction of radioactive waste repositories in all provinces and the national storage center of spent radioactive sources, placed unused and disused radioactive sources under centralized management, and conducted thorough inventory of spent and disused radioactive sources.
- (2) Eliminating the security risks of radioactive sources. China has promulgated the Security Requirements of Radioactive Sources Storage Facilities, plugged security loopholes across the country, and reduced the risks of radioactive security accidents.
- (3) Strengthening international cooperation. China has actively cooperated with the IAEA and the United States on security management and supervision of radioactive sources, including training Chinese regulatory personnel and upgrading the security level of certain key facilities for demonstration purpose.

## 4. COMBATING ILLICIT TRAFFICKING OF NUCLEAR MATERIALS

China endeavors to strengthen its capabilities for the inspection of nuclear materials at borders, attaches importance to customs officials training, and actively engages in international cooperation in the above-mentioned fields.

- (1) Strengthening inspection and detection capabilities in gateway ports. China has been continuously increasing the deployment of radiation detecting equipments at gateway ports. Over 900 radiation detecting equipments of various types have been installed nationwide, covering land, shipping and aviation ports.
- (2) Setting up the China Customs Training Center for Radiation Detection. This center, which is a China-US joint project, has hosted eight domestic training courses for over 210 customs officials, and its first radiation detection technology training workshop for Asia-Pacific countries.
- (3) Deepening relevant international cooperation. China has carried out a series of cooperation projects with other countries including the United States, Russia and Kazakhstan, and conducted a number of workshops and exercises. As a pilot program for ' Megaport Initiative ', Yangshan Port in Shanghai is gradually taking shape and delivering initial results.

# 5. PROMOTING THE BUILDING OF CENTER OF EXCELLENCE (COE) ON NUCLEAR SECURITY

China attaches great importance to the role of Center of Excellence in providing education and training, and strengthening nuclear security culture. China's Center of Excellence on Nuclear Security, which is set up jointly by China and the United States, laid its foundation stone in October 2013. The construction work is well under way and is expected to complete by 2015. The establishment of this CoE will be instrumental in improving the level of nuclear security in China and the Asia-Pacific region, facilitating nuclear security personnel training and technological exchanges, and promoting international cooperation in this area.

In September 2013, China and the IAEA signed the Practical Arrangements of Cooperation on China's Center of Excellence on Nuclear Security. This document affirms that China and the IAEA will fully cooperate on the construction and operation of the CoE, organization of training courses and workshops, as well as research on regulations and industry standards.



## 6. STRENGTHENING INTERNATIONAL LEGAL ARCHITECTURE ON NUCLEAR SECURITY

China supports strengthening international nuclear security architecture, and calls for universal adherence to the multilateral legal instruments on nuclear security. China has ratified the Convention on the Physical Protection of Nuclear Mateiral (CPPNM) and its amendment, and the International Convention for the Suppression of Acts of Nuclear Terrorism.

China actively promotes the entry-into-force of the amended CPPNM. In April 2013, China and the IAEA co-hosted an Asia-Pacific seminar with the goal of engaging more countries to become a party to the Convention and fulfill their obligations under the Convention. Sixteen regional countries attended the Seminar, shared their experiences on the ratification of the Convention, and discussed issues related to its implementation.

China will continue to strictly implement UN Security Council Resolution 1540 and Resolution 1887, and enforce strict measures to prevent illegal access to nuclear and other radioactive materials.

### 7. SUPPORTING THE WORK OF THE IAEA

China supports the central role of the IAEA in international nuclear security architecture and has provided political, technical and financial support to the Organization.

- (1) China sent a high-level delegation to the IAEA Ministerial Conference on Nuclear Security, and participated constructively in the drafting of the 'Nuclear Security Plan 2014-2017' of the IAEA.
- (2) China supports the IAEA in carrying out International Physical Protection Advisory Service (IPPAS). China cohosted a seminar on IPPAS with the IAEA and is giving positive consideration to inviting the IAEA to conduct peer review for one of China's nuclear power plants.
- (3) Since the Seoul Summit, China and the IAEA have co-hosted over 10 seminars or workshops on issues related to nuclear security, radioactive sources security, transportation security and nuclear forensics, 80% of which are regional and international activities. China has also been actively advancing the creation of Center for International Cooperation on Nuclear and Radioactive Security in collaboration with the IAEA. China will host the third International Conference on Challenges Faced by the Technical and Scientific Support Organizations in Enhancing Nuclear Safety and Security.
- (4) China has continued its contribution to the IAEA Nuclear Security Fund, with a view to promoting nuclear security capacity building of China as well as other regional countries. China is giving positive consideration to further increasing tis donation to the Fund and will continue to donate nuclear security equipments developed by China.

## 8. ACTIVELY PARTICIPATING IN INTERNATIONAL EXCHANGES

China values the role of all platforms in the field of nuclear security, and supports the efforts to enhance synergy and coordination among them. China will continue to actively participate in the conferences and exercises on nuclear security organized under the framework of the IAEA, the Global Initiative to Combat Nuclear Terrorism (GICNT), International Criminal Police Organization (INTERPOL), the ASEAN Regional Forum, and the Organization for Economic Cooperation and Development (OECD). China will, as always, support the international campaign of nuclear security and make constructive contribution to enhancing nuclear security capabilities of all countries, and achieving common security for all.